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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,450	10/30/2003	Brian Tracey	1062/D75	7964

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BROMBERG & SUNSTEIN LLP  
125 SUMMER STREET  
BOSTON, MA 02110-1618

EXAMINER
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WEINSTEIN, LEONARD J

ART UNIT	PAPER NUMBER
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3746

MAIL DATE	DELIVERY MODE
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06/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/697,450

Applicant(s)

TRACEY ET AL.

Examiner

Leonard J. Weinstein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/11/2007.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. This office action is in response to the amendment of March 27, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mattson et al. 5,638,737 in view of Snodgrass et al. 6,109,881. Mattson teaches all the limitations as claimed for a bezel assembly including: a bezel 70 for use in delivery of a pressure having a rigid block 74 having a plurality of ports 52 on a port side 30 of the rigid block, each port 52 providing a solvent bondable tubing connection 48a and 48b to the bezel, a plurality of cavities 56 and 58 on a pumping side 72 of the rigid block, each cavity in fluid communication, via 50a, through the rigid block with one of the ports 52 for delivering a pressure applied to the port through the solvent bondable tubing connection 48; wherein the port side 30 is opposite to a

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pumping side 72, with element 72 and element 30 on opposite sides of a chamber bordered by element 78 and wherein port 52 extends from the side of element 30 of element 70 through the rigid block to a side of pump element 72; the ports are hollow tubular structures 52 integral with the rigid block and extending out from the port side 30 of the rigid block; ports 52 have inner diameters larger in size than the cavity, 58 or 56, in fluid communication therewith (figure 2); a first depression 50a in the pumping side 72 of the rigid block, the first depression having at least one 58 of the cavities therein; ribs 40 extending up from the first depression 50a to form an elevated 450 (see figure 5) contour 47 above the pumping side 72 of the rigid block, 76b in figure 1, and the ribs 40 allowing pressure, via 44 and 45, applied through the at least one cavity 58 in the first depression 50a to be applied over the elevated contour, 450 (see figure 5); the ribs 40 form a symmetrical grid, 44 and 45, of air passages; the first depression 50a includes a chamber wall 58 from which the ribs 40 extend such that removal of the ribs 40 leaves an open chamber defined by the chamber wall 54 and 55; the ribs, 40 are removable, figure 3, by a milling operation; an open chamber formed by a second depression 50b in the pumping side 72 of the rigid block; each of the first and second depressions, 50a and 50b, include two, 56 and 58, of the cavities; the ribs 40 are arranged to provide a plurality of air passages, via 45 of 40 and 54 and 55, between the two of the cavities 56 and 58; the ribs, 44 of 40 and 54, leave a straight air passage, center of 56 communicating with 46, unobstructed by ribs 40 at each of the two cavities, 56 and 58, such that at the respective straight air passage connects each of the two cavities 56 and 58 to the plurality of air passages, via 45 of 40 and 54 and 55, between the two of the cavities; wherein the ribs 40 are parallel to a perimeter, inner wall of 52, of the first depression 50; the elevated contour 47 formed by the ribs 40 is a mound that increases in height, 450 (see figure 5), from a perimeter, inner wall of

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52, of the first depression, 50a or 50b, toward a middle 42 of the mound; the ports 52 are hollow tubular structures integral with the rigid block 70 and extending out, via 76a or 76b, from the port side 30 of the block 70; the ports 52 have inner diameters, inner walls of 52, larger in size than the cavity, 58 and 76, in fluid communication therewith; and a means for coupling a rib insert 40, see figure 9 and 10, in the depression, 50a or 50b, the rib insert 40 including ribs 44 extending up from the first depression, 50a or 50b, to form an elevated contour 47 above the pumping side 72 of the rigid block 70, the ribs allowing a pressure applied through the at least one cavity, 56 via element (void) 46, in the first depression, 50a or 50b, to be applied over the elevated contour 47. Further Mattson teaches a rigid block 74 having a plurality of cavities, 58 and 56, on a pumping side 72 of the block in fluid communication with ports 52 accessible from a port side 30 of the block, via removal of element 40 as in Figure 3; a bezel assembly, 74 and 50(a & b), formed by a rigid block 74 having a plurality of cavities, 56 and 58, with a first depression, 50a and/or 50b, having at least one of the cavities 56 in the pumping side 72 of the rigid block 74, ribs 40 extending up from the first depression, 50a and/or 50b, to form an elevated contour 47 above the pumping side 72, and a gasket, (col. 6 ll. 55-67), fitting over the pumping side 72 of the rigid block 74 such that positive pressure, as exemplified by element 72b in figure 2, applied through the at least one cavity 56 in the first depression, 50a and/or 50b, forces a gasket membrane 78 to expand away from the pumping side 72 and negative pressure, as exemplified by element 72a in figure 2, applied through the at least one cavity 56 in the first depression, 50a and/or 50b, pulls the gasket membrane 78 against the elevated contour 47 of the ribs, 40 and 54 and 55; and wherein the ribs, 54 and 55, are molded, see figure 6, into the first depression 50a and/or 50b. Mattson fails to teach the following limitation that is taught by Snodgrass for a system including a bezel assembly 50

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provided with a plurality of cavities, elements 68 and 148, in fluid communication through a rigid block 13 with a plurality of integrally molded ports, element 65 and corresponding port below element 146, capable of delivering a pneumatic pressure (Snodgrass - to be applied to the port, element 65 and corresponding port below element 146, through a solvent bondable tubing connection 71 (col. 3 ll. 5-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an air driven bezel assembly in order to apply a pneumatic pressure to a diaphragm pump and decrease a risk of fluid damage at a molecular level (Snodgrass – col. 2 ll. 11-18).

### ***Response to Arguments***

5. Applicant's arguments filed March 27, 2007 have been fully considered but they are not persuasive.

With regards to the Mattson reference the applicant argues that the door (74) of Mattson does not constitute a rigid block having cavities on a pumping side that are in fluid communication with ports located on a port side.

In response to applicant's argument that Mattson the door (74) of Mattson does not constitute a rigid block having cavities on a pumping side that are in fluid communication with ports located on a port side the examiner disagrees. The door (74) to which the examiner has cited is considered to be single rigid block with a base portion when closed as shown in figure 1 of Mattson. Therefore it follows that with element 72 and element 30 on opposite sides of a chamber bordered by element 78 and wherein port 52 extends from the side of element 30 of element 70 through the rigid block to a side of pump element 72 within the rigid block 74 as discussed, the limitation of a rigid block having cavities on a pumping side in fluid communication with ports located on a port side is met.

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6. Applicant's arguments, see page 11-12, filed April 6, 2007 with respect to the rejection(s) of claim(s) 1 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, a new ground(s) of rejection is made in view of Mattson et al. 5,638,737 in view of Snodgrass et al. 5,772,899 under 35 U.S.C. 103(a).

***Conclusion***


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are cited on form 892 herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJW

  
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